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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,095	09/12/2003	Ashish Thusoo	50277-2256	8871

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EXAMINER
BELL, CORY C

ART UNIT	PAPER NUMBER
2164	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/662,095	THUSOO, ASHISH
	Examiner	Art Unit	
	Cory C. Bell	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 September 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *jan 05 2004*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-25 have been examined.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   The following claims are rejected in view of 35 U.S.C. 112 2nd Paragraph:

4.   **Claims 3, 4, 17, and 18** are rejected because it is unclear what the applicant is intending

to claim. As best understood, it is believed that the applicant is inferring that there are values of

data before change and after the change.

Claim Rejections - 35 USC § 101

5.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6.   **Claims 1-7, and 10-13** are rejected because the method does not produce a "useful,

tangible, and concrete" result, as there is no result other then the aggregation of data.

7.   **Claims 1-7 and 10-14** are rejected as being software *per se* as they could simply be a set

of instructions.

8.   **Claims 15-25** are rejected because the method does not produce a "useful, tangible, and

concrete" result, as there is no result other then the aggregation of data, and the result returned in

claim 25 is non-tangible as it can be embodied in a carrier wave.

9.   **Claims 15-20, and 22-25** are rejected because they are non-useful as they are merely a

set of instructions with no means for performing any operations, thus they relate only to

software.

Claim Rejections - 35 USC § 102

10.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this
> or a foreign country, before the invention thereof by the applicant for a patent.

11.   Claims 1-7, 10, 14-21, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by

reference PL/SQL User's Guide and Reference Release 2 (9.2) hereafter know as [A] (This

reference was included with the information discloser statement and has been labeled A).

12.   **Claim 1** is rejected for the following reasons:

Page 10 of reference [A] shows a database statement the is inherently received by a

database management system and makes a change (UPDATE) that causes a loss of data.

Page 9 of reference [A] teaches the bulk collect clause that when specified aggregates

data by joining the results or the individual updates of values which is inherently

preformed when executing the database statement.

13.   **Claim 2** is rejected because the aggregation occurs when the change is preformed as they

are in the same database statement.

14.   **Claim 3** is rejected because the data must inherently have a value prior to the change in

order to ne lost.

15.   **Claim 4** is rejected because the data must inherently have a value that it is changed to when it is updated.

16.   **Claim 5** is rejected for reasons shown in the rejection of claim 1.

17.   **Claim 6** is rejected because the change being a deletion is shown in the last paragraph of page 9 or [A].

18.   **Claim 7** is rejected because the method inherently has an SQL engine to process the SQL statements.

19.   **Claim 10** is rejected because the system inherently has a client interface to submit a database statement.

20.   **Claim 14** is rejected for the following reasons

   a.   See Claim 1 rejection.

   b.   See last para of page 9, *"returns column values"*

21.   **Claim 15** is rejected for the following reasons:

   See Claim 1 rejection.

22.   **Claim 16** is rejected for the following reasons:

   See Claim 2 rejection.

23.   **Claim 17** is rejected for the following reasons:

   See Claim 3 rejection.

24.   **Claim 18** is rejected for the following reasons:

   See Claim 4 rejection.

25.   **Claim 19** is rejected for the following reasons:

   See Claim 5 rejection.

26.   **Claim 20** is rejected for the following reasons:

See Claim 6 rejection.

27.   **Claim 21** is rejected for the following reasons:

It is inherent that the system of [A] has a computer for executing the instructions.

28.   **Claim 25** is rejected for the following reasons:

See Claim 14 rejection.

Claim Rejections - 35 USC § 103

29.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
manner in which the invention was made.

30.   Claims 8, 9, 11, 13, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable

over [A] in view of [B].

31.   **Claim 8** is rejected for the following reasons:

32.   Reference [A] teaches the claims upon which claim 8 is dependant. The system

inherently contains and SQL Engine and a server side stub, such as the code that

facilitates the network communications. The admitted prior art also teaches the SQL

engine and the Server side stub, see paras 14 and 15 of the background. Reference [B]

teaches Aggregate functions, 4-6 to 4-8 that *"return a single result based on groups of*

rows. " Thus, it would have been obvious to one of ordinary skill in the art to include

aggregate functions in the system with the SQL engine and server side stub. As can be

seen for the following reasons: First, the RETURNING clause is intended to eliminate the need for a select clause, [A] page 9 *"This eliminates the need to SELECT the row after an insert or update, or before a delete."* Thus to truly eliminate the need for the SELECT clause it would need to integrate all the features of the SELECT clause, i.e. the ability to perform aggregate functions. To, as stated on pages 9 and 10 of reference [A], *"As a result, fewer network round trips, less server CPU time, fewer cursers, and less server memory are required."* Reference [A] also shows the need to aggregate data further as it states *"Now do computations involving name and new_sal."*

33. **Claim 9** is rejected for the following reasons:

Reference [A] teaches the claims upon which claim 9 is dependent. The system also inherently has an SQL engine and a client interface. Reference [B] teaches Aggregate functions, 4-6 to 4-8 that *"return a single result based on groups of rows."* Thus, it would have been obvious to one of ordinary skill in the art to include aggregate functions in the system. As can be seen for the following reasons: First, the RETURNING clause is intended to eliminate the need for a select clause, [A] page 9 *"This eliminates the need to SELECT the row after an insert or update, or before a delete."* Thus to truly eliminate the need for the SELECT clause it would need to integrate all the features of the SELECT clause, i.e. the ability to perform aggregate functions. To, as stated on pages 9 and 10 of reference [A], *"As a result, fewer network round trips, less server CPU time, fewer cursers, and less server memory are required."* Reference [A] also shows the need to aggregate data further as it states *"Now do computations involving name and new_sal."*

34. **Claim 11** is rejected for the following reasons:

Reference [A] teaches the claims upon which claim 11 is dependent. The system also inherently has an SQL engine and a client interface. [B] teaches Aggregate functions, 4-6 to 4-8 that *"return a single result based on groups of rows"* and multiple aggregate functions, 4-7 *"AVG(MAX(SAL))."* Thus, it would have been obvious to one of ordinary skill in the art to include aggregate functions in the system. As can be seen for the following reasons: First, the RETURNING clause is intended to eliminate the need for a select clause, [A] page 9 *"This eliminates the need to SELECT the row after an insert or update, or before a delete."* Thus to truly eliminate the need for the SELECT clause it would need to integrate all the features of the SELECT clause, i.e. the ability to perform aggregate functions. To, as stated on pages 9 and 10 of reference [A], *"As a result, fewer network round trips, less server CPU time, fewer cursers, and less server memory are required."* Reference [A] also shows the need to aggregate data further as it states *"Now do computations involving name and new_sal."*

35.   **Claim 13** is rejected for the following reasons:

Reference [A] teaches the claims upon which claim 13 is dependent, as well inherently containing the call interface as it includes a server and a network as stated on pages 9 and 10, *"fewer network round trips, less server CPU time,.* Reference [B] teaches Aggregate functions, 4-6 to 4-8 that *"return a single result based on groups of rows"* and multiple aggregate functions, 4-7 *"AVG(MAX(SAL))."* Thus, it would have been obvious to one of ordinary skill in the art to include aggregate functions in the system. As can be seen for the following reasons: First, the RETURNING clause is intended to eliminate the need for a select clause, [A] page 9 *"This eliminates the need to SELECT the row after an*

insert or update, or before a delete. " Thus to truly eliminate the need for the SELECT

clause it would need to integrate all the features of the SELECT clause, i.e. the ability to

perform aggregate functions. To, as stated on pages 9 and 10 of reference [A], *"As a*

result, fewer network round trips, less server CPU time, fewer cursers, and less server

memory are required. " Reference [A] also shows the need to aggregate data further as it

states *"Now do computations involving name and new_sal.* "

36.   **Claim 22** is rejected for the following reasons:

See claim 11 rejection.

37.   **Claim 24** is rejected for the following reasons:

See claim 13 rejection.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over [A] in

view of [B] in further view of US patent Number 6567803 know hereafter as Ramasey.

38.   **Claim 12** is rejected for the following reasons:

Reference [A] teaches the claims upon which claim 11 is dependent. The system also

inherently has an SQL engine and a client interface. Reference [B] teaches Aggregate

functions, 4-6 to 4-8 that *"return a single result based on groups of rows"* and multiple

aggregate functions, 4-7 *"AVG(MAX(SAL)).* " See Claim 11 rejection for more

information. Ramasay teaches using operator trees corresponding to different aggregate

functions *(Col 4 lines 6-16)* and an access plan that lists function and includes structures

pointing to workspaces performing the functions*(Col 4 lines 17-46).* It would have been

obvious to one of ordinary skill in the art at the time of the invention to include these

features as they provide a method for providing an optimized query that saves processing

time and allow for parallel processing.

39.   **Claim 23** is rejected for the following reasons:

See claim 12 rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Cory C. Bell whose telephone number is (571) 272 2736. The

examiner can normally be reached on m-f 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Rones can be reached on (571) 272 4085. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**SAM RIMELL
PRIMARY EXAMINER**